

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A heating belt comprising:
a flexible support comprising a fabric, the fabric being a woven fabric or an intermeshing of random fibrous strands; and
a composite material coated on the flexible support, the composite material comprising a polymer and inductively-heatable particles.
2. (Original) The heating belt of claim 1, wherein the polymer forms a matrix phase in which the inductively-heatable particles are distributed.
3. (Canceled)
4. (Original) The heating belt of claim 1, wherein the inductively-heatable particles comprise ferromagnetic particles.
5. (Previously Presented) The heating belt of claim 1, wherein the inductively-heatable particles are selected from a group consisting of SrF, zirconium alloy, and compounds stoichiometrically having two divalent cations combined with one of $\text{Ba}_1\text{Fe}_{16}\text{O}_{26}$, $\text{Ba}_2\text{Fe}_{12}\text{O}_{22}$, and $\text{Ba}_3\text{Fe}_{24}\text{O}_{41}$.
6. (Original) The heating belt of claim 5, wherein the divalent cations are selected from the group consisting of Mg, Co, Mn, and Zn.
7. (Original) The heating belt of claim 1, wherein the inductively-heatable particles have a Curie temperature.
8. (Original) The heating belt of claim 7, wherein the Curie temperature of the inductively-heatable particles is between 60 °C and 325 °C.

9. (Original) The heating belt of claim 1, wherein the inductively-heatable particles comprise between about 10 volume percent and about 50 volume percent of the composite material.

10. (Original) The heating belt of claim 1, wherein the polymer has a carbon-based chain structure or a silicone based chain structure.

11. (Previously Presented) The heating belt of claim 1, wherein the polymer has a carbon-based chain structure and is selected from the group consisting of poly(etheretherketone) (PEEK), polyetherketoneketone (PEKK), poly(etherimide) (PEI), polyphenylene sulfide (PPS), poly(sulfone) (PSU), polyethylene terephthalate (PET), polyester, polyamide (PA), polypropylene (PP), polyurethane (PU), polyphenylene oxide (PPO), polycarbonate (PC), PP/mxd, PP/ethylene vinyl alcohol (EVOH), polyethylene (PE), fluorinated ethylene propylene (FEP), polytetrafluoroethylene (PTFE), polyimide, polyamide-imide (PAI), tetrafluoroethylene (TFE), hexafluoropropylene (HFP), perfluoropropyl or perfluoromethyl vinyl ether, homo and copolymers having chlorotrifluoroethylene (CTFE), homo and copolymers having vinylidene fluoride (VF₂), homo and copolymers having vinyl fluoride (VF), and combinations thereof.

12. (Original) The heating belt of claim 1, wherein the polymer comprises a polyimide.

13. (Original) The heating belt of claim 1, wherein the polymer comprises a fluorinated polymer.

14. (Original) The heating belt of claim 13, wherein the fluorinated polymer comprises at least one material from the group consisting of polytetrafluoroethylene (PTFE) and fluorinated ethylene propylene (FEP), perfluoroalkoxy (PFA), and combinations thereof.

15. (Original) The heating belt of claim 1, wherein the polymer comprises silicone.

16. (Previously Presented) The heating belt of claim 1, wherein the fabric is a woven fabric.

17. (Previously Presented) The heating belt of claim 1, wherein the fabric includes polymer fibers selected from the group consisting of aramids and polyesters.

18. (Original) The heating belt of claim 1, wherein the heating belt is a closed loop belt.

19. (Original) The heating belt of claim 1, wherein the heating belt is a cooking belt.

20. (Original) The heating belt of claim 1, wherein the heating belt is an industrial sealing belt.

21. (Original) The heating belt of claim 20, wherein the industrial heating belt is a side sealing belt.

Claims 22-33 (Canceled)

22. (Previously Presented) A heating component comprising:
a flexible support comprising a fabric, the fabric being a woven fabric or an intermeshing of random fibrous; and
a composite material coated on the flexible support, the composite material comprising a silicone polymer and inductively-heatable particles.

Claims 35-39 (Canceled)

23. (Previously Presented) A system for heating an article, the system comprising:
a heating belt comprising:
a flexible support comprising a fabric, the fabric being a woven fabric or an intermeshing of random fibrous strands; and
a composite material coated on the flexible support, the composite material comprising a polymeric matrix and inductively-heatable particles; and
a field generator for inducing a field about the heating belt to heat the inductively-heatable particles.

24. (Original) The system of claim 23, wherein the article is a food item.
25. (Original) The system of claim 23, wherein the article is a package.
26. (Original) The system of claim 23, wherein the system is an industrial side sealing apparatus.
27. (Original) The system of claim 23, wherein the system is an industrial grill.
28. (Previously Presented) A method for heating an article, the method comprising:
placing the article in proximity to a heating belt, the heating belt comprising a flexible support comprising a fabric, the fabric being a woven fabric or an intermeshing of random fibrous strands, and a composite material coated on the flexible support, the composite material comprising a polymeric matrix and inductively-heatable particles; and
inducing a field about the heating belt, the inductively-heatable particles heating in the presence of the field, thereby heating the article.
29. (Original) The method of claim 28, wherein the article is on the heating belt.
30. (Original) The method of claim 28, wherein the article is a food item.
31. (Original) The method of claim 28, wherein the article is a package.
32. (Original) The method of claim 28, wherein the flexible support comprises glass fibers.
33. (Original) The method of claim 28, wherein the polymer matrix is a fluorinated polymer, silicone, or polyimide.

Claims 51-53 (Canceled)

54. (Previously Presented) The heating belt of claim 1, wherein the fabric comprises the polymer fibers, the polymer fibers including high temperature capable thermosetting resin.

55. (Previously Presented) The heating belt of claim 54, wherein the high temperature capable thermosetting resin includes polyimide.

56. (Currently Amended) A heating belt forming a continuous loop and having an inner side and an outer side, the heating belt comprising:
a flexible support comprising a fabric; and
a composite material coated on a first side of the flexible support and located on forming
the outer side of the heating belt ~~relative to the flexible support~~, the composite material comprising a polymer and inductively-heatable particles; and
a material on a second side of the flexible support and forming the inner side of the
heating belt located toward the inner side of the heating belt relative to the
flexible support, the material comprising inductively heatable particles or comprising an insulating material.

57. (Previously Presented) The heating belt of claim 56, wherein the material is the insulating material.

58. (Previously Presented) The heating belt of claim 56, wherein the fabric is a woven fabric.

59. (Previously Presented) The heating belt of claim 56, wherein the polymer is a silicone.

60. (Currently Amended) The heating belt of claim 56, further comprising a polymer layer overlying the composite material ~~toward the outer side of the heating belt~~.

61. (Currently Amended) A heating belt forming a continuous loop and having an inner side and an outer side, the heating belt comprising:
a flexible support comprising a fabric;

a composite material coated on a first side of the flexible support and ~~located on forming~~ the outer side of the heating belt ~~relative to the flexible support~~, the composite material comprising a polymer and inductively-heatable particles; and a coating material coated on a second side of the flexible support and ~~located on forming~~ the inner side of the heating belt ~~relative to the flexible support~~, the coating material being free of inductively heatable particles.

62. (Currently Amended) The heating belt of claim 61, further comprising a polymer layer overlying the composite material ~~on the outer side of the heating belt~~.

63. (Previously Presented) The heating belt of claim 62, wherein the polymer layer includes silicone.

64. (Currently Amended) The heating belt of claim 61, further comprising an insulating material adjacent to the coating material ~~on the inner side of the heating belt~~.

65. (Previously Presented) The heating belt of claim 61, wherein the polymer comprises silicone.

66. (Currently Amended) The heating belt of claim 1, wherein the heating belt forms a continuous loop and forms an inner side and an outer side, wherein the composite material is coated on a first side of the flexible support and forms the outer side of the heating belt ~~relative to the flexible support~~.

67. (Currently Amended) The heating belt of claim 66, further comprising a material on a second side of the flexible support and forming ~~located on~~ the inner side of the heating belt ~~relative to the flexible support~~.

68. (Previously Presented) The heating belt of claim 67, wherein the material includes a polymer and is free of inductively heatable particles.

69. (Currently Amended) The heating belt of claim 67, wherein the material is coated on the second side of the flexible support.

70. (Previously Presented) The heating belt of claim 67, wherein the material includes insulating material.

71. (Previously Presented) The heating belt of claim 1, wherein the fabric is a textile based on a thermally stable reinforcement selected from the group consisting of fiberglass, graphite, and polyaramid.